

93 RF 11040

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**EG&G ROCKY FLATS****EG&G ROCKY FLATS, INC.**

ROCKY FLATS PLANT, P.O. BOX 464, GOLDEN, COLORADO 80402-0464 • (303) 966-7000

September 10, 1993

93-RF-11040

J. K. Hartman  
Assistant Manager  
Transition and Environmental Restoration  
DOE, RFO

Attn: S. R. Grace

**STATUS OF AND APPROACH TO READINESS REVIEW FOR OPERABLE UNIT 2 (OU2) SOIL VAPOR EXTRACTION (SVE) PILOT TEST PROJECT - NMH-461-93**

This letter summarizes Environmental Restoration Management's (ERM's) approach to assessing the readiness to operate the OU 2 SVE Pilot Test Project.

As early as 1991, EM-20 provided direction for the development and use of a graded approach for use in program readiness assessments and evaluations. The ERM Readiness Review (RR) process for the OU 2 SVE Pilot Test Project has followed this approach. The level of documentation accumulated for the RR and the depth of assessment to which environmental, health and safety, quality assurance, and training requirements have been subjected are commensurate with the life-cycle stage of the Soil Vapor Extraction Pilot Project, the magnitude of the hazards involved, and the overall objectives of the Interim Measure/Interim Remedial Action (IM/IRA). Review efforts have focused on the actual operability, quality assurance requirements, and compliance status of the project, rather than focusing on conducting a detailed review of existing programmatic elements used in developing the project.

The RR process has been administered in accordance with Rocky Flats Plant (RFP) Policy 7-25, Readiness Review, and ERM Procedure 3-21000-ADM-18.03, Readiness Review. The process has also been administered in accordance with a Memorandum of Understanding, dated July 1, 1993, between: the Associate General Manager of ERM; the Manager of ERM Quality Assurance, Records and Documentation, and Environmental Quality Support; the Director of ERM Solar Ponds Projects; and, the Manager of ERM Facility Operations Management (FOM).

DIST.	LTR	ENC
AMARAL, M.E.		
BENEDETTI, R.L.	X	
BENJAMIN, A.		
BERMAN, H.S.		
BRANCH, D.B.		
CARNIVAL, G.J.		
COPP, R.D.		
DAVIS, J.G.		
FERRERA, D.W.		
HANNI, B.J.		
HARMAN, L. K.		
HEALY, T.J.		
HEDAH, T.		
HILBIG, J.G.		
KIRBY, W.A.		
KUESTER, A.W.		
MANN, H.P.	X	
MARX, G.E.		
MCDONALD, M.M.		
McKENNA, F.G.		
MONTROSE, J.K.		
MORGAN, R.V.		
POTTER, G.L.		
PIZZUTO, V.M.		
RILEY, J.H.		
RISING, T.L.		
SANDLIN, N.B.		
SETLOCK, G.H.		
STEWART, D.L.		
SULLIVAN, M.T.		
SWANSON, E.R.		
WILKINSON, R.B.	X	
WILLIAMS, S. (ORC)		
WILSON, J. M.		
WYANT, R.B.		
Hodgeson, K.D.	X	
Leitzen, K.	X	
McGowan, M.C.	X	
Sperry, W.S.	X	
Charlton, S.D.	X	
Greenard, T.C.	X	
Klein, M.D.	X	
Lukic, R.S.	X	
Lincoln, R.L.	X	
Tranquillo, T.H.	X	
CORRES CONTROL	X	X
ADMIN RECORD	X	X
PATS/T130G		
TRAFFIC		

## CLASSIFICATION:

UCNI	
UNCLASSIFIED	
CONFIDENTIAL	
SECRET	

AUTHORIZED CLASSIFIER

SIGNATURE  
DOCUMENT CLASSIFICATION  
REVIEW WAVE PER  
CLASSIFICATION OFFICE

DATE

IN REPLY TO RFP CC NO:

ACTION ITEM STATUS

☐ PARTIAL/OPEN☐ CLOSED

LTR APPROVALS:

ORIG &amp; TYPIST INITIALS

Attachment 1 is a copy of the RR Notice for the OU 2 SVE Pilot Test Project, prepared in accordance with ERM Procedure 3-21000-ADM-18.03. A draft RR checklist, completed on July 30, 1993, was derived from basic requirements cited in the RFP Quality Assurance Project Plan (QAPP) and from FOM direction regarding health and safety, training, and environmental compliance issues.

The "baseline" documents for the OU 2 SVE Pilot Test Project (the Implementation/Operation Plan and the Pilot Test Plan) provided the basis for the assessment of compliance with the basic Quality Assurance Project Plan (QAPJP), FOM, Environmental, Health and Safety, and Training requirements. In addition to the Department of Energy (DOE) approval, and in accordance with the requirements set forth in the Rocky Flats Interagency Agreement (IAG), the Implementation/Operation Plan and the Pilot Test Plan have also been reviewed and approved by the Environmental Protection Agency (EPA) and the Colorado Department of Health (CDH).

In the evolution of the final checklist (Attachment 2), the Team Leader (the OU 2 SVE Project Manager) and various discipline experts have met on three occasions to discuss the applicability of various sitewide training requirements, analytical and data quality requirements, ERM operating procedures, health and safety, and environmental compliance issues and guidelines.

At the final RR conference scheduled on Friday, September 3, 1993, the RR Team evaluated the status of the final checklist elements. Any checklist elements which remained open (i.e., those elements for which compliance was not verified) was assessed on the basis of its overall impact to the environment and the health and safety of the workers and the public. In each instance, the RR Team specified the parameters for closure. Open elements that must be closed prior to the actual start of operations (i.e., the pilot testing), have been indicated as "prestart". Otherwise, the statement has been made that operations may proceed on the basis of the date-specific and defined plan of closure, and the item has been indicated as "poststart".

A summary report of the entire checklist status, including any open items, has been forwarded to the RR Board. The RR Board will make its recommendation to the Associate General Manager of ERM, who will issue or withhold authorization for startup of the OU 2 SVE Pilot Test.

The schedule and budget for this RR does not include provision for a special review or assessment by DOE. The inclusion of such a review at this point (if it were to include a provision for startup authorization) will result in a schedule impact that will affect EG&G's ability to meet the milestone for startup of the SVE Pilot Test on September 15, 1993.

J. K. Hartman  
September 10, 1993  
93-RF-11040  
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Should DOE have feedback regarding the above matter, or questions regarding the RR process employed, please contact either me at extension 8540 or M. C. Broussard at extension 8517.



N. M. Hutchins, Acting  
Associate General Manager  
Environmental Restoration Management  
EG&G Rocky Flats, Inc.

DSB:lmw

Orig. and 1 cc - J. K. Hartman

cc:

A. H. Pauole - DOE, RFO  
R. J. Schassburger - " "

Attachments:  
As Stated (2)

## INTEROFFICE CORRESPONDENCE

DATE: July 30, 1993

TO: Distribution  
*MC Broussard for*

FROM: M. C. Broussard, Facility Operations Management, Bldg. 080, X8517

SUBJECT: NOTICE OF READINESS REVIEW FOR OPERABLE UNIT 2, SOIL VAPOR EXTRACTION  
PILOT TEST - MCB-129-93

The attached notice form provides information regarding the Readiness Review (RR) to be conducted August 31 for the OU2 Soil Vapor Extraction (SVE) Pilot Test. This RR is being implemented in accordance with ERM 3-21000-ADM-18.03, Rev. 0; and in accordance with the Memorandum of Understanding on Readiness Reviews dated July 1, 1993, between R. L. Benedetti, K. Bentzen, S.R. Keith, and M. C. Broussard.

Additional RR team members will be added at the discretion of M. D. Klein and D. S. Brown.

The attached OU2 (SVE) RR Checklist is a draft document for preliminary review by the RR Team Leader. Review items may be added to the Checklist as key project elements are more clearly identified through continuing review of baseline documents and pre-work efforts.

Should you have any questions regarding this notice, please contact Dave S. Brown at extension 8745.

DSB:lmw

Attachments:  
As Stated (2)

Distribution:

K. D. Anderson  
K. Bentzen  
W. S. Busby  
S. D. Chestnut  
N. M. Hutchins  
M. D. Klein  
R. S. Luker  
T. R. Trangmar

cc:  
ERM Records Center w/o Attach.

# ROCKY FLATS PLANT - ENVIRONMENTAL RESTORATION MANAGEMENT OU 2 (SVE) IM/IRA IMPLEMENTATION OPERATION READINESS REVIEW CHECKLIST

ITEM NO.	REQUIREMENT / ITEM DESCRIPTION [Source of Requirement]	COMMENTS / CLOSURE DOCUMENTATION	STATUS	RESPONSIBLE PARTY	DATE DUE	DATE COMPLETE
1.01	A project specific organization structure has been developed and specified in the OU2 (SVE) Pilot Test Plan / QA Addendum (QAA). [QAPIP 1.0 § 2.0]					
1.02	Specific responsibilities (including subcontractor responsibilities) for OU2 (SVE) Pilot Test activities have been established in the OU2 (SVE) Pilot Test Plan / QAA. [QAPIP 1.0 § 2.0]					
2.01	A Pilot Test Plan for the OU2 (SVE) has been prepared, and reviewed and approved by EPA/CDH, DOE RFO, and EG&G ERM. [IAG Attachment 2, § VI; QAPIP 2.0 § 3.0]					
2.02	A QAA has been prepared and approved for the OU2 (SVE) Pilot Test Plan. [QAPIP 2.0 § 3.0]					
2.03	OU2 (SVE) personnel (including subcontractor personnel) have received orientation, as applicable: [QAPIP 2.0 § 4.0, and 2-21000-OPS-FO.14]					
2.03A	ERM QA					
2.03B	SOPs					
2.03C	EMRG					
2.03D	RFEDS Datacap - 02.01					
2.04	OU2 (SVE) personnel (including subcontractor personnel) have documented evidence of training in accordance with ERM 2-11000-ADM-2.01 for the following, as applicable: [QAPIP 2.0 § 4.1; DOE Order 5480.11; RFP ER Site H&S Plan § 4.1.2; RFP 1-10000-TUM § 1.0] • OSIA Haz. Waste Site Health & Safety Training (including OJT and annual updates, as applicable) • Applicable Health & Safety Practices (as defined in the ERM H&S Plan) • EG&G Radiological Safety Training • RFP GET • Waste Generator Training • Building Specific Training • Training to applicable operating procedures as identified in the OU2 (SEV) QAA. • Hazmat Certification (Subcontractor and the Project Manager)					
2.04A						
2.04B						
2.04C						
2.04D						
2.04E						
2.04F						
2.04G						
2.04H						

DRAFT

Status as of 7/30/93 - 8:45 AM

# ROCKY FLATS PLANT - ENVIRONMENTAL RESTORATION MANAGEMENT OU 2 (SVE) IM/IRA IMPLEMENTATION OPERATION READINESS REVIEW CHECKLIST

ITEM NO.	REQUIREMENT / ITEM DESCRIPTION [Source of Requirement]	COMMENTS / CLOSURE DOCUMENTATION	STATUS	RESPONSIBLE PARTY	DATE DUE	DATE COMPLETE
2.05	OU2 (SVE) subcontractor personnel position descriptions have been prepared in accordance with ERM 2-11000-ADM-02.02 for personnel (including subcontractor personnel) performing/supervising data collection and interpretation. NOTE: The Position Description Form from ERM 2-11000-ADM-02.02 should be used to document subcontractor personnel qualifications. (QAPIP 2.0 § 4.2)					
3.01	Data Quality Objectives (DQOs) have been established for the OU2 (SVE) Pilot Test activities and PARCC parameter objectives have been identified for all measurement data. (QAPIP 3.0 § 3.1)					
3.02	Field QC sample requirements (including sample types and frequencies) and acceptance criteria have been established in the OU2 (SVE) Test Plan /QAA. (QAPIP 3.0 § 3.5)					
3.03	SOPs have been developed and approved by EPA/CDH and ERM for all proposed field activities, and that the applicable SOPs are identified in the OU2 (SVE) IM/IRA Implementation and Operation Plan. (QAPIP 3.0 § 3.2) NOTE: This includes SOPs for field screening and visual inspections, all pilot tests/subtests, soil gas sampling, and groundwater sampling (i.e., activities included in the draft OU2 (SVE) IM/IRA Implementation and Operation Plan.					
3.04	Verify that OU2 (SVE) analytical requirements are consistent with analytical methods specified in the RFP GRRASP. [i.e., are methods specified in the Pilot Test Plan and the Implementation and Operation Plan consistent with those specified in the QAPIP 3.0 § 3.3 and GRRASP Part A, Attachment I, § III.D]					

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Status as of 7/30/93 - 8:45 AM

# ROCKY FLATS PLANT - ENVIRONMENTAL RESTORATION MANAGEMENT OU 2 (SVE) IM/IRA IMPLEMENTATION OPERATION READINESS REVIEW CHECKLIST

ITEM NO.	REQUIREMENT / ITEM DESCRIPTION [Source of Requirement]	COMMENTS / CLOSURE DOCUMENTATION	STATUS	RESPONSIBLE PARTY	DATE DUE	DATE COMPLETE
4.01A	Procurement documents for subcontracted services contain applicable technical, regulatory, and QA requirements, as specified in the OU2 (SVE) Test Plan/OAA, the QAPJP, and applicable SOPs. [QAPJP 4.0 § 3.0]					
4.01B	Verify that OU2 (SVE) utilizes analytical laboratories approved by the ERM Sample Management Any changes or revisions to applicable SOPs have been identified. If needed, verify that DCNs have been prepared and approved in accordance with ERM 3-21000-ADM-05.07 [QAPJP 5.0 § 3.8]					
5.01						
6.01	The OU2 (SVE) Test Plan / OAA and applicable SOPs have been placed under (ERM) document control. [QAPJP 6.0]					
7.01	Subcontractors who have been selected to conduct the OU2 (SVE) activities were selected from a list of qualified vendors, or were evaluated based on the technical and quality requirements for services specified in the approved SOW. Note: Subcontractors selected under the MTS satisfy this prerequisite. [QAPJP 7.0 § 7.3]					
8.01	Verify that RIFEDS has been notified per the requirements specified in 3-21000-OPS-FO.14. [3-21000-OPS-FO.14]					
11.01	The necessary test plans/procedure(s) have been developed and approved to ensure satisfactory performance of items and systems. [QAPJP 11.0 § 3.2; QAPJP 5.0]					
12.01	The M&TE necessary to obtain the required environmental measurements, as specified in the OU2 (SVE) Plans, has been identified (an M&TE Identification and Calibration List should be completed) and is of the proper type, range, accuracy and tolerance. Calibration and preventive maintenance schedules have been established. [QAPJP 12.0]					
20.01	Required State permits have been obtained to conduct the activities under review. [IAG Chapter 1, paragraph 8]					

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Status as of 7/30/93 - 8:45 AM

**ROCKY FLATS PLANT - ENVIRONMENTAL RESTORATION MANAGEMENT**  
**OU 2 (SVE) IM/IRA IMPLEMENTATION OPERATION READINESS REVIEW CHECKLIST**

ITEM NO.	REQUIREMENT / ITEM DESCRIPTION [Source of Requirement]	COMMENTS / CLOSURE DOCUMENTATION	STATUS	RESPONSIBLE PARTY	DATE DUE	DATE COMPLETE
20.02	Any required Internal RFP permits, etc, necessary to conduct the OU2 (SVE) activities have been obtained.					
20.02A	• IWCP approval (if applicable)					
20.02B	• Land use/Soil Disturbance					
20.02C	• NEPA clearance					
20.02D	• Air Quality (if applicable)					
20.02E	• Construction Management MOU					
20.02F	• Subcontractor space requests					
20.02G	• Buffer zone access					
20.02H	• OSHA Inspections on equipment					
20.03	A site specific H&S Plan has been prepared and approved. [ER Site Health & Safety Program Plan, Chptr. 6]					




**EG&G ROCKY FLATS**
**ENVIRONMENTAL MANAGEMENT  
DEPARTMENT**
**READINESS  
REVIEW  
NOTICE**

 Readiness Review No.: OU2 (SVE)  
 WP - 12052 / 53 / 54 / 55  
 Date: July 30, 1993

**PROJECT/PROGRAM DESCRIPTION:**

Pilot Test for Soil Vapor Extraction (SVE), Operable Unit No. 2

**READINESS REVIEW SCOPE:**

This review will determine if prerequisites necessary to initiate the described work have been met. Prerequisites are specified in the RFP Sitewide QAPjP, the OU2 (SVE) Pilot Test Plan, the OU2 (SVE) IM/IRA Implementation and Operation Plan, applicable ERM administrative and operating procedures, the IAG, and the ERM Site Health & Safety Program Plan.

The Readiness Review will occur at 1:00 p.m. on Tuesday, August 31, in Building 080 (Interlocken), at a specific location to be determined.

**READINESS REVIEW BOARD MEMBERS:**

- Chairman -- M. C. Broussard, Manager, ERM Facility Operations
- K. Bentzen, Manager, ERM Quality Assurance, Records, and Documentation  
Manager, Environmental Quality Support
  - W. S. Busby, Acting Director, ERM Remediation Project Management
  - N. M. Hutchens, Director, ERM Environmental Science & Engineering

**READINESS REVIEW TEAM:**

- Leader -- M. D. Klein, ERM Environmental Science & Engineering; OU2 (SVE) Project Manager
- D. S. Brown, ERM Facility Operations (Acting)
  - R. S. Luker, Environmental Quality Support
  - T. R. Trangmar, Environmental Design Engineering
  - 
  -

 Prepared By: \_\_\_\_\_  
                   D. S. Brown, ERM/FOM (Acting)

Date: \_\_\_\_\_

 Board Chairman: \_\_\_\_\_  
                       M. C. Broussard, Manager, ERM/FOM

Date: \_\_\_\_\_

# **ROCKY FLATS PLANT - ENVIRONMENTAL RESTORATION MANAGEMENT OU 2 (SVE) READINESS REVIEW CHECKLIST**

Attachment 2  
93-RF-11040  
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ITEM NO.	REQUIREMENT / ITEM DESCRIPTION [Source of Requirement]	COMMENTS / CLOSURE DOCUMENTATION	STATUS	RESPONS. PARTY	DATE DUE	DATE COMP
1.01	A project specific organization structure has been developed and specified.  [OAP/P 1.0 § 2.0]	Included in the PMF, which is not a controlled document. The final org chart, with specific personnel named, is still pending completion.	OPEN - Prestart Must be completed prior to actual start of Pilot Test.	Madell	9/1 9/17	
1.02	Specific responsibilities (including subcontractor responsibilities) have been established.  [OAP/P 1.0 § 2.0]	The Implementation/Operation Plan includes the field team descriptions in § 4.2.1. They are yet to be fully integrated with Item 1.01 above, but the team responsibilities are clear and adequate.	CLOSED Fig. 6.1 and § 4.2.1 of the Implementation/Operation Plan.	O'Melia	9/1	9/2
2.01	A Pilot Test Plan for the OU2 (SVE) has been prepared, and reviewed and approved by EPA/CDH, DOE RFO, and EG&G ERM.  [IAG Attachment 2, F.VI.C., § 2.0 § 3.0]	As the lead organization, CDH has provided the only approval required for the Implementation/Operation Plan and the Pilot Test Plan, per the requirements of the IAG of a RCRA site.	CLOSED Letter, G. W. Baughman (CDH) to R. J. Schassburger (DOE), 9/25/93	Luker/Klein	9/1	9/2
2.02	A OAA has been prepared and approved.  [OAP/P 2.0 § 3.0]	A OAA is included in the Pilot Test Plan. Appendix E and § 3.6 of the Implementation/Operation Plan provide the OACC requirements.	CLOSED Documentation noted at left.	Luker/Klein	9/1	9/2
2.03	OU2 (SVE) personnel (including subcontractor personnel) have received orientation, as applicable: [OAP/P 2.0 § 4.0, and 2-21000-OPS-FO 14]	ERM EOS (Darlene Breen) has the orientation available upon request. An agenda is provided as closure, but actual orientation has not occurred.	OPEN - Poststart	O'Melia	9/1 9/16	
2.03A	ERM QA					
2.03B	SOPs	A training section is being added to the Implementation/Operation Plan. Some training has also already been conducted, and rosters provided. A 40-hour training period will be conducted by EITs during 90 checkout.	CLOSED Roster for FOCs and GIs Roster for Drum Training Roster and course outline for Data Management Training Memo from M. D. Klein to D. S. Brown, 9/1/93	O'Melia	9/1	9/2
2.03C	Environmental Mgt. Radiological Guides (EMRG)	Part of Site Safety Briefing, scheduled for 9/3. Sign-off sheets will be furnished.	OPEN - Prestart	O'Melia	9/7	
2.03D	RFEDS Datacap - 02.01	Part of W-C RFP Data Management Course. Agenda provided. Sign-off sheets will be furnished.	OPEN - Prestart	O'Melia	9/7	

# ROCKY FLATS PLANT - ENVIRONMENTAL RESTORATION MANAGEMENT OU 2 (SVE) READINESS REVIEW CHECKLIST

ITEM NO.	REQUIREMENT / ITEM DESCRIPTION [Source of Requirement]	COMMENTS / CLOSURE DOCUMENTATION	STATUS	RESPONS. PARTY	DATE DUE	DATE COMP
2 04	OU2 (SVE) personnel (including subcontractor personnel) have documented evidence of training in accordance with ERM 2-11000-ADM-2-01 for the following, as applicable: [OAP/P 2 0 §4.1; DOE Order 5480.11; RFP ER Site H&S Plan §4.1.2; RFP 1-10000-TUM §1.0] • OSHA Haz. Waste Site Health & Safety Training (including OJT and annual updates, as applicable)	A matrix has been provided for the subcontract personnel. A matrix or other documentation is needed for verification on EG&G personnel.	Need lapses closed (W-C). Need EG&G training documentation.	O'Melia Madal	9/7	
2 04A		Completed. Some lapses open.	OPEN - Pre-start • Training Matrix for subcontractors: • LAPSED TRAINING to be SCHEDULED PRIOR TO STARTUP. • Pending EG&G documentation of OPEN - Pre-start • Pending completion documentation. OPEN - Pre-start • Pending completion documentation. CLOSED OPEN - Pre-start • Pending documentation CLOSED Documentation cited at left.	O'Melia Madal Madal Madal O'Melia O'Melia Kluin	9/7 9/7 9/7 9/7 9/1 9/1 9/3	
2 04B	• Applicable Health & Safety Practices (as defined in the ERM H&S Plan)	Part of Site Safety Briefing, scheduled for 9/3. Sign off sheets will be furnished.				
2 04C	• EG&G Radiological Safety Training	Part of Site Safety Briefing, scheduled for 9/3. Sign off sheets will be furnished.				
2 04D	• RFP GET	All completed or scheduled.				
2 04E	• Waste Generator Training	Completed				
2 04F	• Training to applicable operating procedures as identified in the OU2 (SVE) OAA.	Refer to § D.2.1 of Project OAA; much of this will be "post-startup". Meeting from M. D. Kluin to D. S. Brown, 9/1/93, re: training to be performed by Resource Technology Group (RTG). The subcontractor has at least one person trained and will so document. NOTE: This should have been a requirement stated in the SOW.				
2 04G	• Hazmat Employee Certification (DOT familiarization)	This is addressed by § 4 of the Implementation Plan (not yet completed). EOS (Luker) will accept the format in the Plan in lieu of the form, since the § 4 descriptions are substantively compliant.	OPEN - Pre-start Need documentation of training.	Kluin O'Melia	9/1 9/3	9/3
2 05	Subcontractor personnel position descriptions have been prepared in accordance with ERM 2-11000-ADM-02-02 for personnel (including subcontractor personnel) performing/supervising data collection and interpretation. NOTE: The Position Description Form from ERM 2-11000-ADM-02-02 should be used to document subcontractor personnel qualifications. [OAP/P 2 0 § 4.2]		CLOSED Reference Item 1.02 of the checklist.	O'Melia & Luker	9/3	9/2
3 01	Data Quality Objectives (DQOs) have been established for the activities and PAR/QC parameter objectives have been identified for all measurement data. [OAP/P 3 0 § 3.1]	DQOs are established and PAR/QC parameter objectives are delineated in the Pilot Test Plan, Doc. No. 21000-WP-OU2-07 (Final, 1/4/93)	CLOSED Documentation cited at left.	Luker	9/3	9/2

## FINAL CHECKLIST

Status as of 9/7/93 - 9:53 AM  
Shaded areas indicated closed items.

# ROCKY FLATS PLANT - ENVIRONMENTAL RESTORATION MANAGEMENT OU 2 (SVE) READINESS REVIEW CHECKLIST

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ITEM NO.	REQUIREMENT / ITEM DESCRIPTION (Source of Requirement)	COMMENTS / CLOSURE DOCUMENTATION	STATUS	RESPONS. PARTY	DATE DUE	DATE COMP.
3 02	Field QC sample requirements (including sample types and frequencies) and acceptance criteria have been established. (OAP P 3.0 § 3.5)	QC requirements included in Table 3.2 of the (final) Implementation/Operation Plan.	CLOSED Documentation cited at left.	O'Melia > Luker	9/3	9/2
3 03	SOPs have been developed and approved by EPA/CDH and ERM for all proposed field activities, and that the applicable SOPs are identified in the OU2 (SVE) IM/RA Implementation and Operation Plan.  (OAP P 3.0 § 3.2) NOTE: This includes SOPs for field screening and visual inspections, all pilot tests/subtests, soil gas sampling, and groundwater sampling (ie, activities included in the draft OU2 (SVE) IM/RA Implementation and Operation Plan.	Need to be certain that the OAA section is approved. THE KNOWN/CONTROLLED PARTS OF THE TEST PROCESS MUST BE PROCEDURALIZED. THE NOTEBOOK PROCESS/PROCEDURE ACCOMMODATES THE INVOCATION OF ESTABLISHED PROCEDURES AT APPROPRIATE POINTS.  Concerns were expressed about HEPA procedures. Procurement has provided guidance to RTG for utilization/inclusion of EG&G's Filter Change Out Procedure (JTL O.F.S.-SOP-65) in the maintenance manual (J. A. Salazar to RTG, 8/27/93). Procedures need to be placed in the project O&M Manual. EG&G comment sheets on the O&M Manual have been provided to RTG, including ???  Data quality levels are clear. Mobile lab processes are clearly covered in the Soil Vapor Survey Work Plan, § 3.6 and Appendix E of the Implementation/Operation Plan address analytical and QA/QC requirements.	OPEN - Priscilla Did not receive complete copy of comments.  CLOSED Documentation cited at left.	O'Melia > Klein > Trangmar  Madel	9/3  9/8	9/2
3 04	Analytical requirements are consistent with analytical methods specified in the RFP GRRASP. (I.e., are methods specified in the Pilot Test Plan and the Implementation and Operation Plan consistent with those specified in the OAP P 3.0 § 3.3 and GRRASP Part A, Attachment I, § III D)		CLOSED Documentation cited at left.	Klein > Luker	9/1	9/2
4 01A	Procurement documents for subcontracted services contain applicable technical, regulatory, and QA requirements, as specified in the OU2 (SVE) Test Plan/OAA, the OAP P, and applicable SOPs (OAP P 4.0 § 3.0)	SOW provides sufficient documentation/verification and was reviewed by ERM/EOS. NOTE: HAZMAT CERTIFICATION (DOT) REQUIREMENT SHOULD BE NOTED IN	CLOSED Documentation cited at left.	Klein > Brown	9/3	9/2
4 01B	Verify that OU2 (SVE) utilizes analytical laboratories approved by the ERM Sample Management  Any changes or revisions to applicable SOPs have been identified. If needed, verify that DCNs have been prepared and approved in accordance with ERM 3-21000-ADM-05-07. (OAP P 5.0 § 3.8)	Sample Mgt information letter on file (PAK-243-93).  EOS has verified that required DCNs are in place.	CLOSED Documentation cited at left.  OPEN - Priscilla Need copy of memo, S. Luker > M. Klein regarding this matter	Klein  Klein > Luker	9/1  9/3	9/2

## FINAL CHECKLIST

Status as of 9/7/93 - 9:53 AM

Shaded areas indicated closed items.



# ROCKY FLATS PLANT - ENVIRONMENTAL RESTORATION MANAGEMENT OU 2 (SVE) READINESS REVIEW CHECKLIST

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ITEM NO.	REQUIREMENT / ITEM DESCRIPTION [Source of Requirement]	COMMENTS / CLOSURE DOCUMENTATION	STATUS	RESPONS. PARTY	DATE DUE	DATE COMP
6.01	The OU2 (SVE) Test Plan / O&A and applicable SOPs have been placed under (ERIM) document control. [O&A/P 6.0]	The OU2 baseline documents are not under controlled distribution. See Appendix A to this checklist for present and committed status of these documents.	OPEN - Prestart & Poststart See Appendix A for required closure dates.	Luker-Brown	9/1 9/8	
7.01	Subcontractors selected to conduct the activities were selected from a list of qualified vendors, or were evaluated based on the technical and quality requirements for services specified in the approved SOW. Note: Subcontractors selected under the MTS partly the prerequisite. [O&A/P 7.0 § 7.3]	Subcontractors are MTS, T. R. Brady (THB-297-93) to M. D. Klein, 8/26/93 - MTS 22544750	CLOSED Documentation cited at left.	Klein	9/3	9/2
8.01	Verify that RFEDS has been notified per the requirements specified in 3-21000-OPS-FO-14, 13-21000-OPS-FO-14	RFEDS has been notified. See closure documentation for item 4.018 above.	CLOSED Documentation cited at left.	Madel	9/1	9/2
11.01	The necessary test plans/procedures have been developed and approved to ensure satisfactory performance of items and systems. [O&A/P 11.0 § 3.2, O&A/P 5.0]	These items are included within checklist items 2.01, 2.02 and 3.03.	CLOSED			8/24
12.01	The M&TE necessary to obtain the required environmental measurements, as specified in the OU2 (SVE) Plans, has been identified (an M&TE Identification and Calibration List should be completed) and is of the proper type, range, accuracy and tolerance. Calibration and preventive maintenance schedules have been established. [O&A/P 12.0]	A checklist is being completed by RTG. See comment notes transmitted to RTG via procurement regarding O&M Manual. See also closure documentation on item 3.03.	OPEN - Prestart Did not receive complete copy of comments.	Klein Madel	9/3 9/8	
20.01	Required State permits have been obtained to conduct the activities under review. [IAG Chapter 1, paragraph 8]	The only permitting required has been the APEN. See W: Dean Pearson to CDH 8/26/93 EG&G ACD notice	CLOSED Documentation cited at left.	O'Mella Klein O'Mella	9/1	9/2

FINAL CHECKLIST  
Status as of 9/7/93 - 9:53 AM  
Shaded areas indicated closed items.

# ROCKY FLATS PLANT - ENVIRONMENTAL RESTORATION MANAGEMENT OU 2 (SVE) READINESS REVIEW CHECKLIST

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ITEM NO.	REQUIREMENT / ITEM DESCRIPTION [Source of Requirement]	COMMENTS / CLOSURE DOCUMENTATION	STATUS	RESPONS. PARTY	DATE DUE	DATE COMP
20.02	Any required internal RFP permits, etc. necessary to conduct the activities have been obtained.					
20.02A	• IMCP approval (if applicable)	IMCP TR067620 approved 9/1/93	CLOSED Documentation cited at left	Trangmar & Saunders Madel	9/3 9/1	9/2 9/2
20.02B	• Land Use / Soil Disturbance	Soil Disturbance Forms 50-B-4-63 & 60-B-4-63 Land Use approved. Auth. 898214, 3/31/93	CLOSED Documentation cited at left			
20.02C	• NEPA clearance	Categorical exclusion is claimed. Documentation not sufficient. Is the CX for all of OU 2 scope, or just some phases?	OPEN - Prestart	Madel	9/1 9/8	
20.02D	• Air Quality (if applicable)	N/A. See also documentation for item 20.01	CLOSED			
20.02E	• Construction Management MOU	The MOU provided is not sufficient: not signed by both parties.	OPEN - Prestart	Madel	9/1	9/2
20.02F	• Subcontractor space requests	Cleared				
20.02G	• Buffer zone access	Cleared	Need verification	O'Melia Madel	9/8 9/1	
20.02H	• OSHA inspections on equipment	To be completed. CM IS RESPONSIBLE FOR INSURING OSHA COMPLIANCE OF ITEMS ON SITE. Should be part of the MOU.	OPEN - Prestart	Trangmar	9/8	
20.03	A site specific H&S Plan has been prepared and approved. [EH Site Health & Safety Program Plan, Chptr. B]	Approved 8/6/93 Copy of signed cover sheet provided	CLOSED Documentation cited at left.	Madel	9/1	9/2

FINAL CHECKLIST  
Status as of 9/7/93 - 9:53 AM  
Shaded areas indicated closed items.

## Status and Commitments for OU 2 SVE Controlling Documents

(reference Item 6.01 of Checklist)

TITLE	PRESENT STATUS	COMMITTED ACTION	DUE DATE	RESPONSIBLE INDIVIDUAL
Operations and Maintenance Manual, Rocky Flats mobile Soil Vapor Extraction Pilot Plant, Vol. 1, Operating Procedures	Draft 10/7/30/93	Format and control per ERM requirements. Completion date at right presumes no major content changes and therefore completion not required prior to startup. If there are major content changes, document control must be implemented prior to startup.	10/4/93	Klein>Luker
OU 2 IM/IRA Implementation and Operation Plan, Soil Vapor Extraction Pilot Test, RFP, Operable Unit 2	Draft July, 1993	Format and control per ERM requirements. Completion date at right presumes no major content changes and therefore completion not required prior to startup. If there are major content changes, document control must be implemented prior to startup.	10/4/93	Klein>Luker
Pilot Test Plan, Soil Vapor Extraction Technology, Subsurface Im/IRA, OU 2	FINAL 10/10/4/93	Place under ERM control. No formatting changes will be required until/it revised. A deficiency report (DR) has been written against the formatting requirement.	9/8/93	Luker
Project Management Plan, 903 Pad, Mound, and East Trenches Area, OU 2	Draft 11/21/92	Format and control per ERM requirements. Completion date at right presumes no major content changes and therefore completion not required prior to startup. If there are major content changes, document control must be implemented prior to startup.	10/4/93	Klein>Luker
Project Specific H&S Plan for Soil Vapor Extraction, Subsurface Im/IRA, East Trenches Area, OU 2	FINAL Aug., 1993	Place under ERM control. No formatting changes will be required until/it revised. A deficiency report (DR) has been written against the formatting requirement.	9/8/93	Luker
Soil Vapor Extraction Pilot Test Plan Site No. 2, Enhanced Vapor Extraction of Organic Compounds with Electrical Subsurface Heating, East Trenches Area, Operable Unit 2	Draft June, 1993	Format and control per ERM requirements. Completion date at right presumes no major content changes and therefore completion not required prior to startup. If there are major content changes, document control must be implemented prior to startup.	10/4/93	Klein>Luker
Soil Vapor Survey Work Plan, Subsurface Im/IRA, 903 Pad, Mound, and East Trenches Areas, OU 2	FINAL 10/11/2/93	Place under ERM control. No formatting changes will be required until/it revised. A deficiency report (DR) has been written against the formatting requirement.	9/8/93	Luker